

# Region 4 Science and Ecosystem Support Division 980 College Station Road, Athens, Georgia 30605-2700 D.A.R.T. Id: 16-0512

Project: 16-0512, Jordan Lake AGPT - Reported by Sue Dye

#### **November 7, 2016**

#### **4SESD-EAB**

## **MEMORANDUM**

**SUBJECT:** FINAL Analytical Report

Project: 16-0512, Jordan Lake AGPT

Surface Water Protection

**FROM:** Sue Dye

EAB Analyst

THRU: Stacey Box, Chief

**EAB Water Quality Section** 

**TO:** Sue Dye

Attached are the final results for the analytical groups listed below. These analyses were performed in accordance with the Ecological Assessment Branch's (EAB) Laboratory Operations and Quality Assurance Manual (EAB LOQAM). Any unique project data quality objectives specified in writing by the data requestor have also been incorporated into the data unless otherwise noted in the Report Narrative. Data has been verified based on the EAB LOQAM specifications and may have been qualified if the applicable quality control criteria were not met. For a listing of specific data qualifiers and explanations, please refer to the Data Qualifier Definitions included in this report. The reported results are representative only of the samples as received by the laboratory.

Analyses Included in this report:

Method Used:

Algal Assay (ALG)

AGPT- Maximum Standing Crop (Dry Weight) SM 8111 (Water)

Page 1 of 8 E163604 ALG FINAL 11 07 16 1235 11/7/16 12:35



Region 4 Science and Ecosystem Support Division 980 College Station Road, Athens, Georgia 30605-2700 D.A.R.T. Id: 16-0512

Project: 16-0512, Jordan Lake AGPT - Reported by Sue Dye

### Sample Disposal Policy

Because of the laboratory's limited space for long term sample storage, our policy is to dispose of samples on a periodic schedule. Please note that within 60 days of this memo, the original samples and all sample extracts and/or sample digestates will be disposed of in accordance with applicable regulations. The 60-day sample disposal policy does not apply to criminal samples which are held until the laboratory is notified by the criminal investigators that case development and litigation are complete.

These samples may be held in the laboratory's custody for a longer period of time if you have a special project need. If you wish for the laboratory to hold samples beyond the 60-day period, please contact our Sample Control Coordinator by e-mail at R4SampleCustody@epa.gov, and provide a reason for holding samples beyond 60 days

Page 2 of 8 E163604 ALG FINAL 11 07 16 1235 11/7/16 12:35



Region 4 Science and Ecosystem Support Division 980 College Station Road, Athens, Georgia 30605-2700 D.A.R.T. Id: 16-0512

Project: 16-0512, Jordan Lake AGPT - Reported by Sue Dye

# SAMPLES INCLUDED IN THIS REPORT

# Project: 16-0512, Jordan Lake AGPT

Sample ID	Sample ID Laboratory ID		<b>Date Collected</b>	Date Received		
1	E163604-01	Surface Water	8/10/16 11:30	9/1/16 10:30		
2	E163604-02	Surface Water	8/10/16 14:10	9/1/16 10:30		

Page 3 of 8 E163604 ALG FINAL 11 07 16 1235 11/7/16 12:35



Region 4 Science and Ecosystem Support Division 980 College Station Road, Athens, Georgia 30605-2700 D.A.R.T. Id: 16-0512

Project: 16-0512, Jordan Lake AGPT - Reported by Sue Dye

#### **DATA QUALIFIER DEFINITIONS**

None

#### ACRONYMS AND ABBREVIATIONS

CAS Chemical Abstracts Service

Note: Analytes with no known CAS identifiers have been assigned codes beginning with "E", the EPA ID as assigned by the EPA Substance Registry System (www.epa.gov/srs), or beginning with "R4-", a unique identifier assigned by the EPA Region 4 laboratory.

- MDL Method Detection Limit The minimum concentration of a substance (an analyte) that can be measured and reported with a 99% confidence that the analyte concentration is greater than zero.
- MRL Minimum Reporting Limit Analyte concentration that corresponds to the lowest demonstrated level of acceptable quantitation. The MRL is sample-specific and accounts for preparation weights and volumes, dilutions, and moisture content of soil/sediments.
- TIC Tentatively Identified Compound An analyte identified based on a match with the instrument software's mass spectral library. A calibration standard has not been analyzed to confirm the compound's identification or the estimated concentration reported.

#### **ACCREDITATIONS:**

- ISO The test, if analyzed after June 26, 2012, is accredited under the EPA Region 4 ASB's ISO/IEC 17025 accreditation issued by ANSI-ASQ National Accreditation Board/ACLASS. Refer to certificate and scope of accreditation AT-1691.
- NR The EPA Region 4 Laboratory has not requested accreditation for this test.

Page 4 of 8 E163604 ALG FINAL 11 07 16 1235 11/7/16 12:35



Region 4 Science and Ecosystem Support Division 980 College Station Road, Athens, Georgia 30605-2700 D.A.R.T. Id: 16-0512

Project: 16-0512, Jordan Lake AGPT - Reported by Sue Dye

# **Algal Assay**

Project: 16-0512, Jordan Lake AGPT

Sample ID: 1 Lab ID: E163604-01
Station ID: CPF086C Matrix: Surface Water

Date Collected: 8/10/16 11:30

CAS Number	Analyte	Results	Qualifiers	Units	MDL MRL	Prepared	Analyzed	Method
R4-1086	AGPT- Maximum Standing Crop (Dry Weight)	2.2		mg/L	0.10	10/04/16	10/17/16	SM 8111
R4-1087	Limiting Nutrient: Nitrogen					10/04/16	10/17/16	SM 8111

Page 5 of 8 E163604 ALG FINAL 11 07 16 1235 11/7/16 12:35



Region 4 Science and Ecosystem Support Division 980 College Station Road, Athens, Georgia 30605-2700 D.A.R.T. Id: 16-0512

Project: 16-0512, Jordan Lake AGPT - Reported by Sue Dye

# **Algal Assay**

Project: 16-0512, Jordan Lake AGPT

Sample ID: 2 Lab ID: E163604-02
Station ID: CPF055C Matrix: Surface Water

Date Collected: 8/10/16 14:10

CAS Number	Analyte	Results	Qualifiers	Units	MDL MRL	Prepared	Analyzed	Method
R4-1086	AGPT- Maximum Standing Crop (Dry Weight)	3.6		mg/L	0.10	10/04/16	10/17/16	SM 8111
R4-1087	Limiting Nutrient: Nitrogen					10/04/16	10/17/16	SM 8111

Page 6 of 8 E163604 ALG FINAL 11 07 16 1235 11/7/16 12:35



Region 4 Science and Ecosystem Support Division 980 College Station Road, Athens, Georgia 30605-2700 D.A.R.T. Id: 16-0512

Project: 16-0512, Jordan Lake AGPT - Reported by Sue Dye

# Algal Assay (ALG) - Quality Control US-EPA, Region 4, SESD

		Reporting		Spike	Source		%REC		RPD	
Analyte	Result	Limit	Units	Level	Result	%REC	Limits	RPD	Limit	Notes
Batch 1610011 - A 8111 AGPT										
<b>Duplicate (1610011-DUP1)</b>	Sour	Source: E163604-02		Prepared: 10/05/16 Analyzed: 10/17/16						
SM 8111										
AGPT- Maximum Standing Crop (Dry Weight)	3.180	0.10	mg/L		3.580			11.8	20	
Limiting Nutrient	Not Determined		"		Nitrogen				200	
Duplicate (1610011-DUP2)	Source: E163505-03			Prepared: 1	10/05/16 A	nalyzed: 10	0/17/16			
SM 8111										
AGPT- Maximum Standing Crop (Dry Weight)	0.2300	0.10	mg/L		0.2100			9.09	20	
Limiting Nutrient	Not Determined		"		0.000				200	
Reference (1610011-SRM1)				Prepared: 1	10/05/16 Aı	nalyzed: 10	0/17/16			
SM 8111										
AGPT- Maximum Standing Crop (Dry Weight)	10.28		mg/L	10.200		101	90-110			
Reference (1610011-SRM2)				Prepared: 10/05/16 Analyzed: 10/17/16						
SM 8111				·	·	·	·			·
AGPT- Maximum Standing Crop (Dry Weight)	988600		mg/L	994000		99.5	90-110			

Page 7 of 8 E163604 ALG FINAL 11 07 16 1235 11/7/16 12:35



Region 4 Science and Ecosystem Support Division 980 College Station Road, Athens, Georgia 30605-2700 D.A.R.T. Id: 16-0512

Project: 16-0512, Jordan Lake AGPT - Reported by Sue Dye

**Notes and Definitions for QC Samples** 

Page 8 of 8 E163604 ALG FINAL 11 07 16 1235